M. H. CLARK.

FOOTWEAR.

APPLICATION FILED AUG. 10, 1916.

1,289,662. Patented Dec. 31, 1918.

Fig. 1.

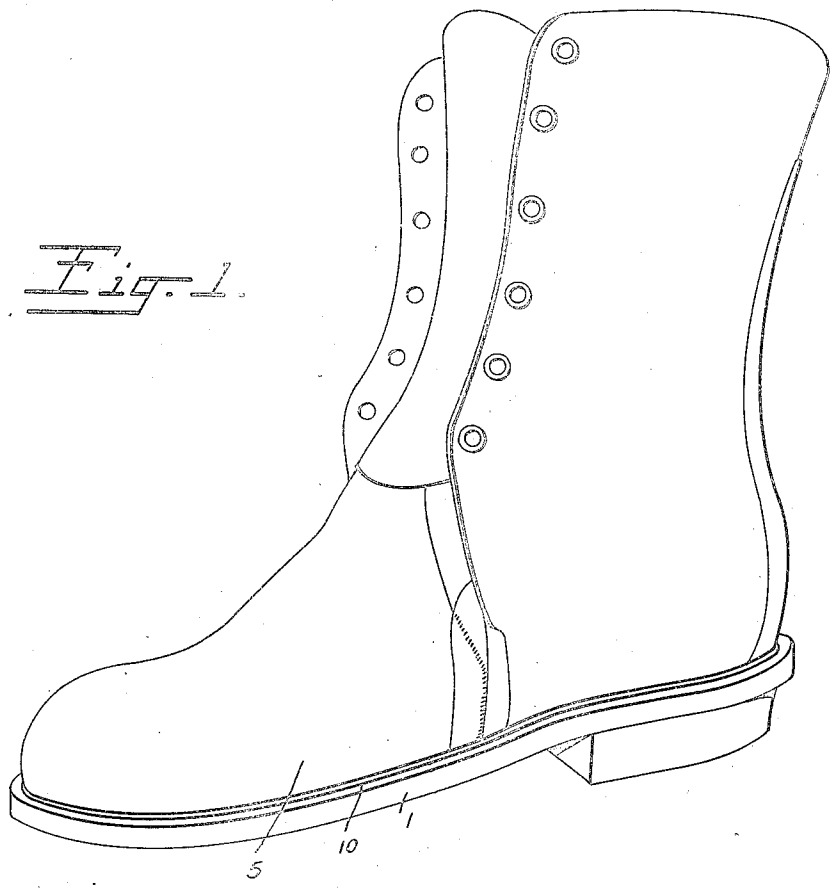
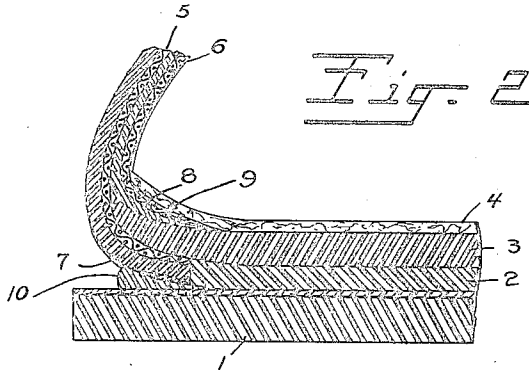



Fig. 2.




WITNESS:

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# UNITED STATES PATENT OFFICE.

MYRON H. CLARK, OF HASTINGS-UPON-HUDSON, NEW YORK, ASSIGNOR TO GOODYEAR'S METALLIC RUBBER SHOE COMPANY, A CORPORATION OF CONNECTICUT.

## FOOTWEAR.

1,289,662. Specification of Letters Patent. Patented Dec. 31, 1918.

Application filed August 10, 1916. Serial No. 114,139.

*To all whom it may concern:*

Be it known that I, MYRON H. CLARK, a citizen of the United States, residing at Hastings-upon-Hudson, county of Westchester, State of New York, have invented certain new and useful Improvements in Footwear, of which the following is a full, clear, and exact description.

This invention relates to rubber footwear and more particularly to boots or shoes in which the upper is secured to a projecting sole by turning the lower margin of the upper inwardly and securing it to the sole.

The form of this type of attachment heretofore used has been found to be somewhat weak due first:—to the relatively small area of the joint between the upper, outsole, and insole; and second, to the lack of support and retention given the walls of the upper by the ordinary type of filler and insole.

The principal object of the present invention accordingly is to correct these points and thereby produce a stronger form of attachment.

In the accompanying drawings wherein one form of the invention is shown—

Figure 1 represents a perspective view of a boot embodying the invention; and

Fig. 2 is an enlarged fragmentary cross section of the toe of the boot.

Referring now to the drawings the numeral 1 indicates a rubber outsole provided on its upper surface with a layer of high grade gum forming a bond therebetween and a filler 2 upon which is a second filler 3 supporting an insole 4. The upper comprises two superposed plies 5 and 6 preferably of rubberized fabric, the lower margins 7 and 8 of which are separated. The inner ply 6 lies in a well rounded curve about and contacts with the extremity of the insole 4, the edge of the latter being inclined slightly upwardly. A bond of cement 9 between the insole and fabric portion of the inner ply 6 serves to hold these parts firmly together.

The outer ply 5 lies in a similar curve about and contacts with the edge of the filler 3, the edge of the latter being inclined slightly upwardly. A wedge shaped strip of high-grade gum 10 serves to form a bond between the outer surface of the outer ply 5 and the upper surface of the outsole 1, an additional cement bond between the outer surface and the upper surface of the member 10 being also provided. The insole and filler 3 thus form lap-joints with the inner surfaces of the plies, the margin of the inner ply lying between and secured to the insole and filler, the margin of the outer ply lying between and secured to the filler and outsole.

By attaching the separated plies to the insole and filler and outsole and filler the area of the joint between the upper and sole is practically doubled thus substantially doubling the resistance of the bond. Contact with the projecting edges of the insole and filler, which holds the fabric in curved position equalizes the strain by directing the strain both horizontally and vertically. Further contact with both insole and filler distributes the strain over a larger area, than when no such contact occurs, the strain being borne entirely by the bond, or where the upper contacts with the edge of the insole only.

Having thus described my invention what I claim and desire to protect by Letters Patent is:

1. In an article of footwear, a rubber outsole, an insole, a filler, a wedged shaped strip of yielding material, and an upper comprising two superposed plies having their lower margins separated and turned inwardly, the margin of the inner ply lying between and directly secured to said insole and said filler, the margin of the outer ply lying between and directly secured to said filler and said wedged shaped strip.

2. In an article of footwear, a rubber outsole, an insole, a single unitary filler, and an upper comprising two superposed plies of rubberized fabric the opposed faces of the margins of said plies being directly secured to said filler.

3. In an article of footwear, an insole, a filler having its marginal outer surface curved upwardly, an upper comprising an inner ply having its lower margin turned in between said insole and filler, and an outer ply having its lower margin curved about

the curved margin of said filler, said filler extending downwardly to fill in the space between the opposed edges of said outer ply, a tapered strip adjacent the margin of said outer ply along its outer surface and having its outer surface in the plane with the outer surface of the filler, and an outsole superposed upon the outer surface of said filler and tapered strip and having its margin extending therebeyond, all of said parts being secured together by vulcanization.

Signed at New York, N. Y., this 25th day of July, 1916.

MYRON H. CLARK.